remaining 36 strands were tensioned to 138 kN (31 kips), and are shown as type "B" strands. Of the 36 fully prestressed strands, four were located in the top flange. Along with these four prestressed strands, there were four No. 13 metric bars (#4 bars) placed in the top flange. Two bars extended 10.47 m (34.33 ft.) from each end of the girder and overlapped at the center of the girder. These bars were used also to help limit possible cracking that might occur during production of the girder.

Stirrups in the form of 90° bent bars were made of No. 13 metric bars (#4 bars). At each end of the girder, the stirrups were placed at 50.8 mm (2 in.) spacing for 203.2 mm (8 in.) and increased to 228.6 mm (9 in.) for the next 914.4 mm (36 in.). In the central portion of the girder, including midspan, the stirrup spacing was approximately 609.6 mm (24 in.). In addition to the stirrups, bottom flange bars were used at the end sections, but not in the central portion of the girder. The concrete cover for the stirrups and bars was 50.8 m (2 in.).

The cross-sectional properties of the girder are given in Table 4.1, in which $\mathbf{y_b}$ is the distance from the centroidal axis to the bottom fiber, **I** is moment of inertia, $\mathbf{S_b}$ is section modulus with respect to the bottom fiber, and $\mathbf{S_t}$ is section modulus with respect to the top fiber.

Table 4.1 Cross-sectional Properties of AASHTO Type V Girder

Area (in^2)	$\mathbf{y_b}$ (in)	**I** (in^4)	$\mathbf{S_b}$ (in^3)	$\mathbf{S_t}$ (in^3)
1,013	31.96	521,180	16,307	16,790

Note: 1 in. = 25.4 mm

The 28-day concrete strength specified for the Type V girder was 48 MPa (7,000 psi) and the mix proportion of the concrete as furnished by the producer is shown in Table 4.2.